Monsanto

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SUMMARY--INTERIM STATUS

CHRONIC TOXICITY WITH AROCLORS

In May and June of 1969, two-year feeding studies were initiated with *Aroclors 1242, 1254 and 1260. The materials are being fed to rats and dogs at levels of 1, 10 and 100 parts per million in the diet.

After 15 months there have been no clinical effects observed in the rats in the Aroclor 1242 study. Animals sacrificed at six and twelve months showed negative micropathology. There have been no clinical effects in the dogs and blood and urine chemistry studies at the one, three, six and twelve month intervals were negative.

In the case of Aroclor 1254, rats sacrificed at six months and twelve months showed increased liver weights in males of the animals on the 100 ppm diet. Micropathology was negative at all levels. In the dogs there have been depressed weight gains in the females at all levels fed and at the 100 ppm level in the males. Blood and urine chemistry has been negative.

With Aroclor 1260 there has been increased liver and kidney weights in male rats at the 100 ppm level in the animals sacrificed at twelve months. Micropathology is negative. In the dogs there has been depressed weights gains in the females at 10 and 100 ppm and in the males at 100 ppm. Twelve month clinical determinations revealed a moderate increase in serum alkaline phosphatase in five of six animals on the 100 ppm diet.

The above data indicate that these materials are no more and possibly less toxic than DDT in rats and dogs. This is reassuring in that DDT is probably the least toxic insecticide to mammalian species. Further, there is general agreement that DDT has not presented a hazard in animals or man in spite of its presence in the environment.

Interim or progress reports such as above have been provided periodically to the U. S. Food and Drug Administration, the U. S. Department of Agriculture and other governmental agencies.

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*Aroclors 1242, 1254 and 1260 are polychlorinated biphenyls containing 42%, 54% and 60% of chlorine respectively.

DSW 019888

STLCOPCB4007821

PCB 9

STATUS REPORT TO

MONSANTO COMPANY

TWO-YEAR CHRONIC ORAL TOXICITY STUDY WITH
AROCLOR 1254
IN BEAGLE DOGS

DECEMBER 10, 1970

IBT NO. C7299

After 18 months of a proposed two-year chronic oral toxicity study of Aroclor 1254 administered to purebred beagle dogs at dietary levels of 1, 10 and 100 ppm, the following abnormalities have been noted:

1) Males receiving 100 ppm and females receiving 100 or 10 ppm have displayed weight gains lower than those for untreated controls.

2) Two fatalities have occurred: a 100 ppm female after 33 weeks of testing and a 10 ppm female after 37 weeks. The 100 ppm female died from traumatic injuries received in a fight; gross and histologic examinations revealed no significant abnormalities. Gross and histologic examinations of the 100 ppm female revealed moderate chronic peritonitis.

No significant abnormalities have been noted in the remaining parameters:

Food Consumption
Behavioral Reactions
Hematologic Studies
Blood Chemistry Studies
Urine Analyses

DSW 019889

STLCOPCB4007822

STATUS REPORT TO

MONSANTO COMPANY

TWO-YEAR CHRONIC ORAL TOXICITY STUDY WITH
AROCLOR 1260
IN BEAGLE DOGS

DECEMBER 10, 1970

IBT NO. C7299

After 18 months of a proposed two-year chronic oral toxicity study of Aroclor 1260 administered to purebred beagle dogs at dietary levels of 1, 10 and 100 ppm, the following abnormalities have been noted:

1) Males receiving 100 ppm and females receiving 100, 10 or 1 ppm have displayed lower weight gains than those for the untreated controls.

2) Two fatalities have occurred: a 100 ppm female after 29 weeks and a 100 ppm male after 33 weeks. Gross and histologic examination revealed severe chronic peritonitis in the female and moderate pneumonia in the male.

3) Twelve and 18-month clinical determinations have revealed moderate increases in serum alkaline phosphatase activity among animals receiving 100 ppm.

No significant abnormalities have been noted in the remaining parameters:

Food Consumption
Behavioral Reactions
Hematologic Studies
Urine Analyses

DSW 019890